

THE IPLEMENTATION OF CIRCULAR ECONOMY IN INDONESIA

Indonesia Best Practices

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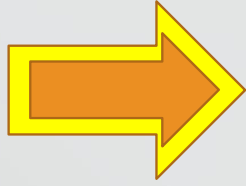
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MINISTRY OF ENVIRONMENT & FORESTRY

REPUBLIC OF INDONESIA

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THE NATIONAL SITUATIONS ON SOLID WASTE MANAGEMENT

INCREASING OF
POPULATION



DEVELOPMENT
OF SW
TECHNOLOGY



LIFE STYLE

MINDSET



LESS PUBLIC
AWARENESS



INCREASING TYPE
AND AMOUNT OF
SOLID WASTE
PRODUCTION



POLICY TRANSFORMATION

(Law No. 18/2008, Govt Reg No. 81/2012 & Presidential Decree No. 97/2017)

SHIFTING THE PARADIGM

END OF PIPE SOLUTION

- WASTE JUST POLLUTANT LOADS
- NO WASTE REDUCTION
- NO WASTE TO RESOURCE
- NO RESOURCE EFFICIENCY
- FULL VIRGIN RESOURCE EXTRACTION
- LINEAR ECONOMY

Before law

3R & EPR

- REDUCE WASTE AS POLLUTANT LOADS
- REDUCTION AT SOURCE
- **WASTE TO RESOURCE**
- ~~RESOURCE EFFICIENCY~~
- LIMIT VIRGIN RESOURCE EXTRACTION
- PRODUCER RESPONSIBILITY

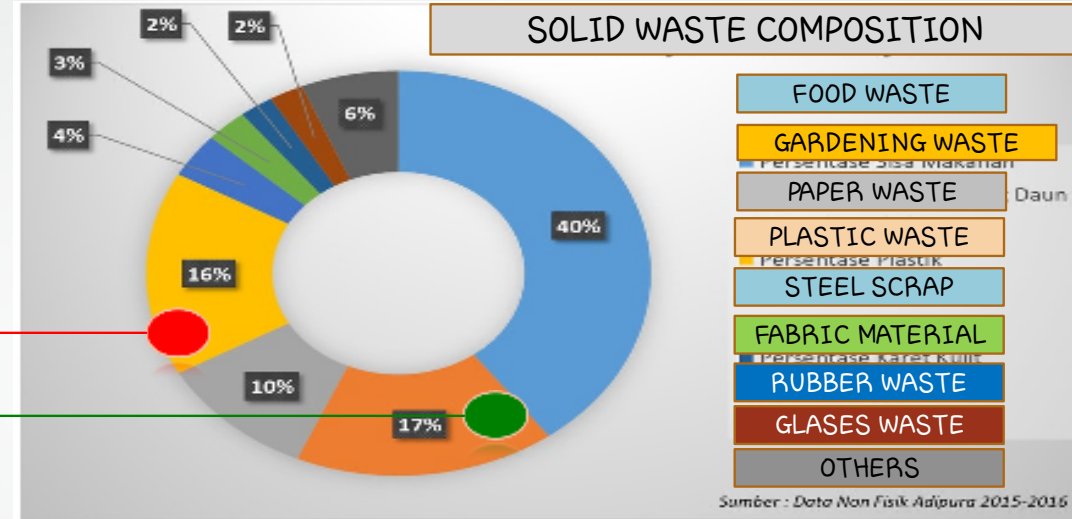
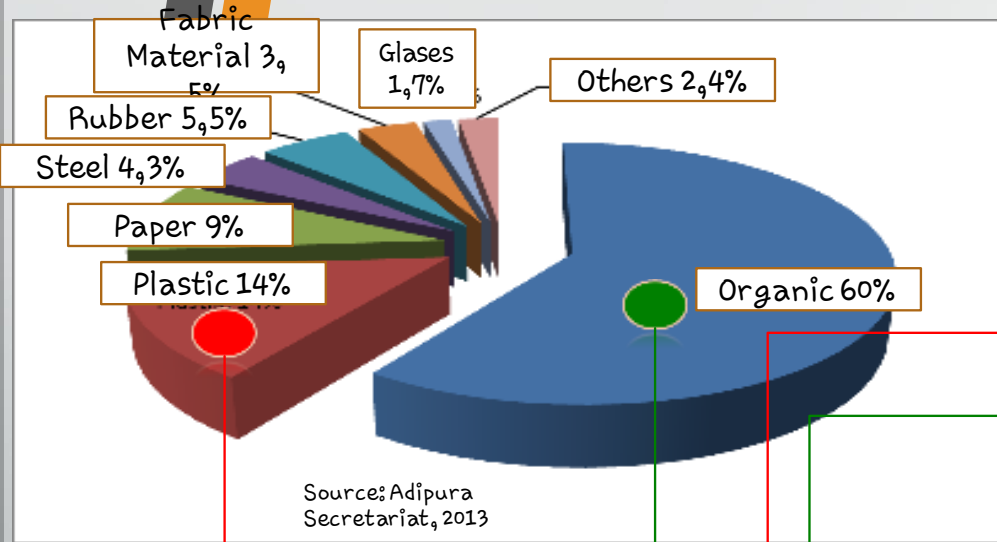
Law implementation

CIRCULAR ECONOMY

- LESS WASTE BY DESIGN
- MAKE WASTE A NEW LIFE AS LONG AS POSSIBLE
- **CIRCULAR ECONOMY**
- ~~SUSTAINABLE CITIES AND COMMUNITIES (SDG GOAL NO 11)~~
- RESPONSIBLE CONSUMPTION & PRODUCTION (SDG GOAL NO 12)

Advance implementation

NATIONAL SOLID WASTE PROFILE

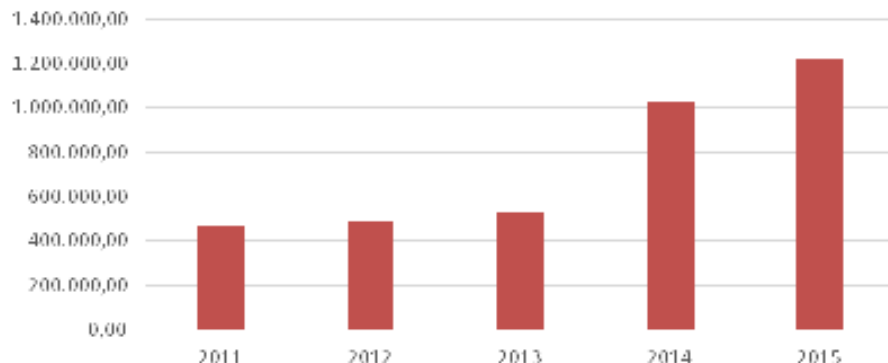


CHANGING COMPOSITION:

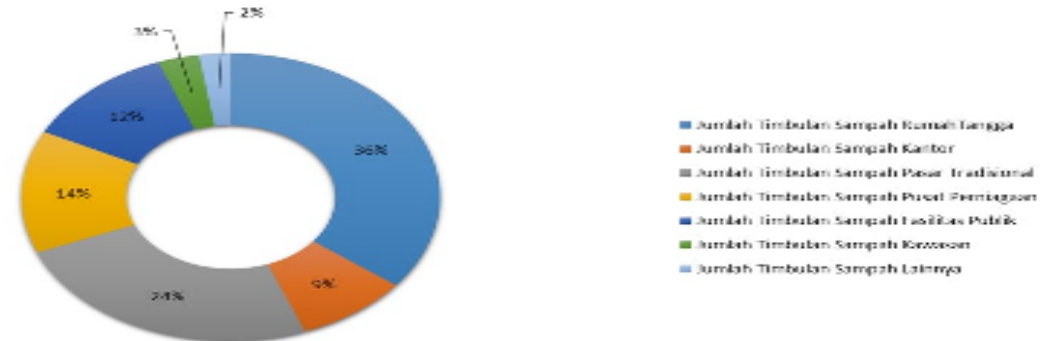
→ DECREASED OF ORGANIC WASTE : 60% (2013) → 57% (2016)

→ INCREASED OF PLASTIC WASTE : 14% (2013) → 16% (2016)

Trend of Plastic Waste Production in 22 Big and Metropolitan Cities



SOURCES OF SOLID WASTE



SOLID WASTE POTENTIAL AS RESOURCE MATERIAL

No	Composition		Amount (tons)	Usage
	Type	%		
1	Compostable organic	57	37,480,198.27	Compost, biogas, heat, electricity
2	Plastic	16	10,520,757.41	Raw material, heat electricity
3	Paper	10	6,575,473.38	Raw material
4	Metal	4	2,630,189.35	Raw material
5	Rubber	2	1,315,094.68	Refused Derived Fuel (RDF)
6	Textile	3	1,972,642.01	Raw material
7	Glass	2	1,315,094.68	Raw material
8	Others	6	3,945,284.03	Others
	TOTAL	100	65,754,733.81	Source: MoEF Indonesia, 2016-2017

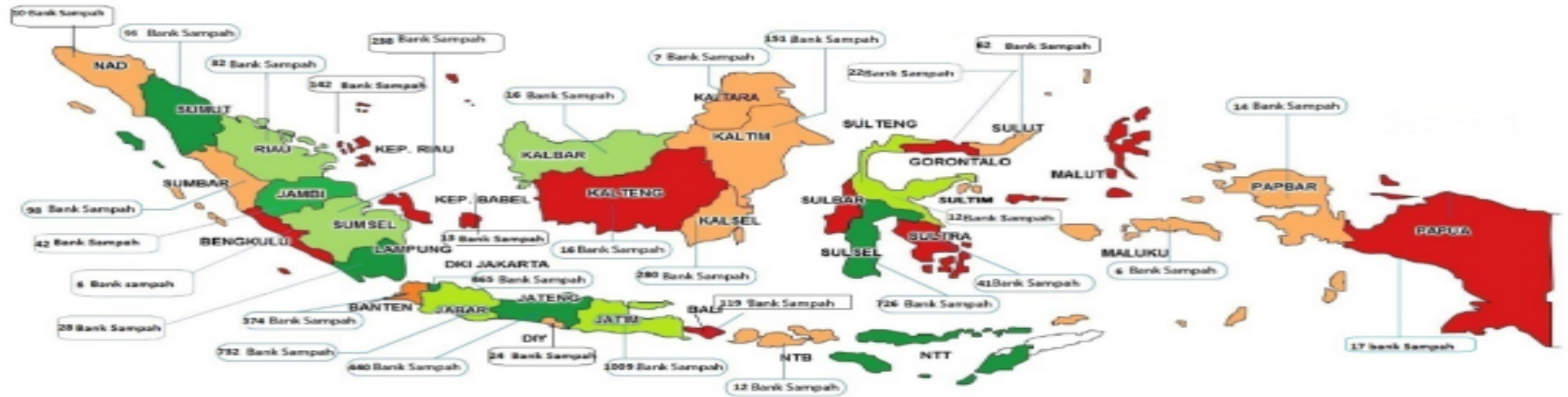


Circular Economy Concept on Solid Waste Management (Ministerial Decree No. 13/2012)

- ❑ Integrated solid waste management is managed from the sources to the final treatment (TPA) with promoting the 3R (reduce-reuse-recycle) and economic circular concepts by using Waste Bank mechanism
- ❑ Waste Bank is a kind of solid waste facility managed by community (informal sector) to collect recycable solid waste by educating people to do segregation the waste from the source and bring its waste to the Waste Bank
- ❑ People get economical benefit by segregating the waste and waste is handled from the sources (circular economy and environmental conservation concept)



The Implementation of 3R Program of Solid Waste Management through the Waste Bank to Promote Resource Efficiency and Circular Economy

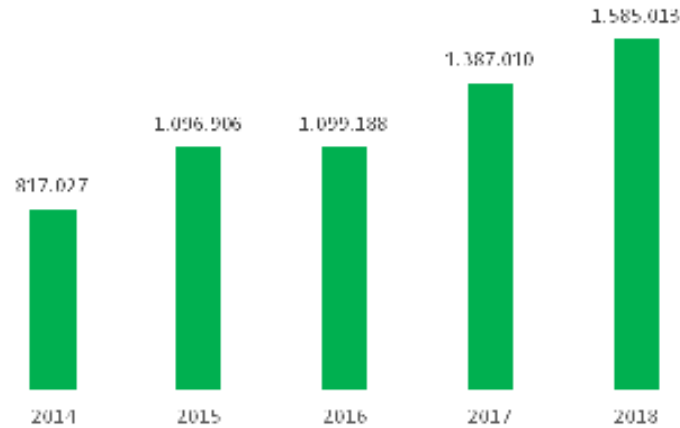


Jumlah Bank Sampah 2017:
5.244

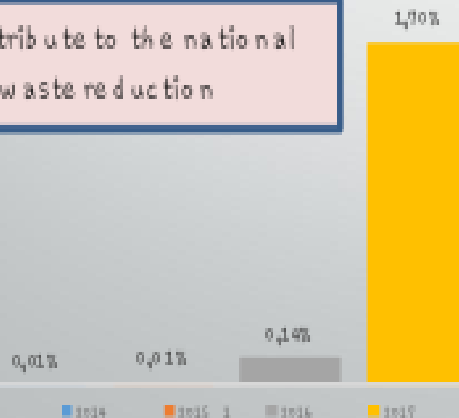
- Total Waste Bank is about 5,244 spreading in 34 provinces and 219 cities in Indonesia
- Waste Bank create social engineering of sorting process to implement 3R program in the community
- Waste reduction from the sources
- Need more time and excellent methode to make this program massive in Indonesia

SOCIAL, ENVIRONMENTAL AND ECONOMIC BENEFITS FROM CIRCULAR ECONOMY OF THE WASTE BANK

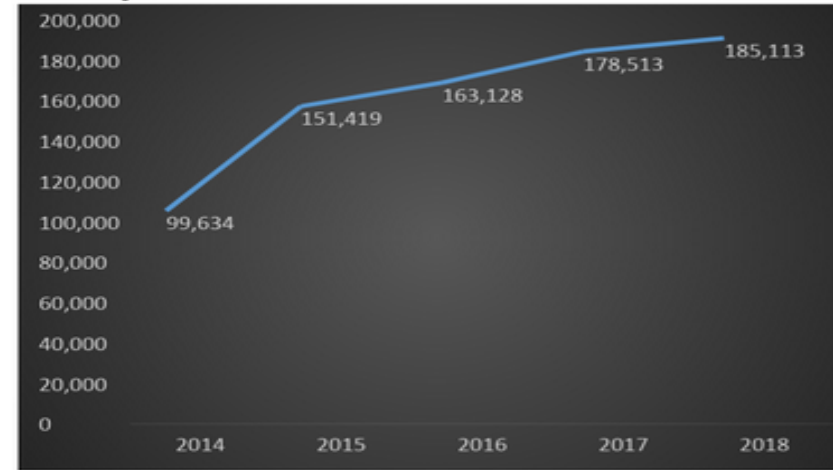
1. Increased solid waste treated in the source (ton/year)



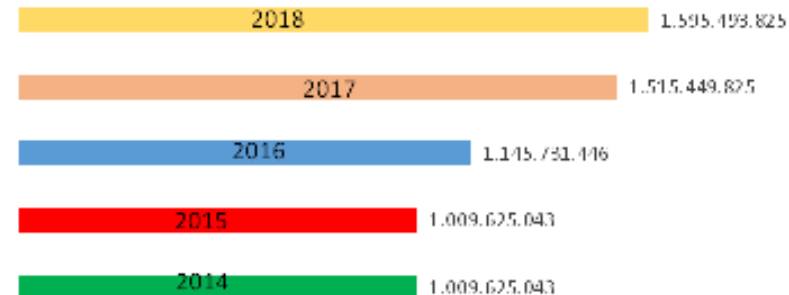
3. Contribute to the national waste reduction



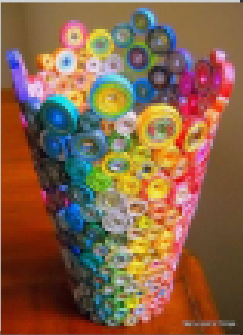
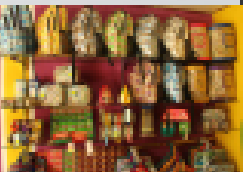
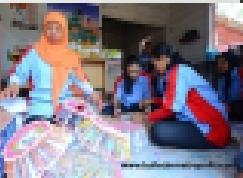
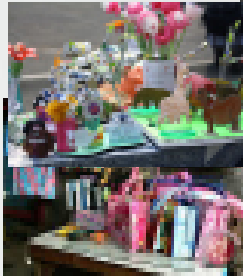
2. Create job opportunity for community



4. Circular Economy (Income)



Average per year (IDR)



NATIONAL STRATEGY AND POLICY OF SWM

REGULATIONS APPROACHES

GOOD
ENVIRONMENT
AND HEALTH
QUALITY

CLEAN INDONESIA
PROGRAM 2020

- PRESIDENTIAL
REGULATION NO 97 YEAR
2017 ON JAKSTRANAS

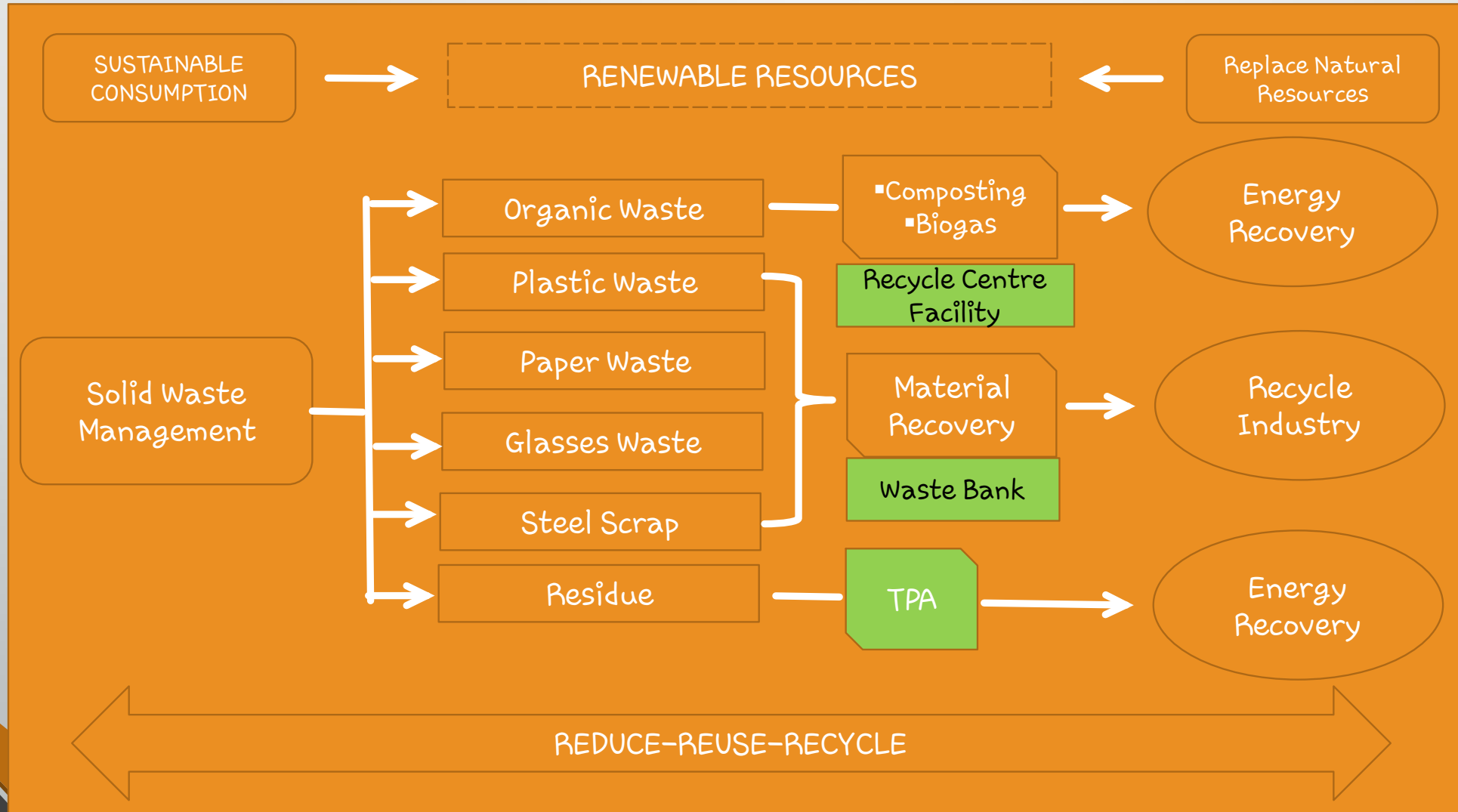
- ACT NO 18 YEAR 2008 → SOLID WASTE MANAGEMENT
- GOVT. REGULATION NO 81 YEAR 2012 → HOUSEHOLD WASTE AND HOUSEHOLD-LIKE WASTE MANAGEMENT
- **MINISTERIAL DECREE NO 13 YEAR 2012 → 3R AND WASTE BANK**
- MINISTERIAL DECREE NO 53 YEAR 2016 → ADIPURA PROGRAM
- MINISTERIAL DECREE NO 59 YEAR 2016 → LEACHATE STANDARD (TPA)
- MINISTERIAL DECREE NO 70 YEAR 2016 → EMISSION STANDARD OF INSINERATION PROCESS FOR SW
- PRESIDENTIAL DECREE NUMBER 35 YEAR 2018 REGARDING THE ACCELERATION

National Target of Solid Waste Management (Presidential Decree No 97/2017)

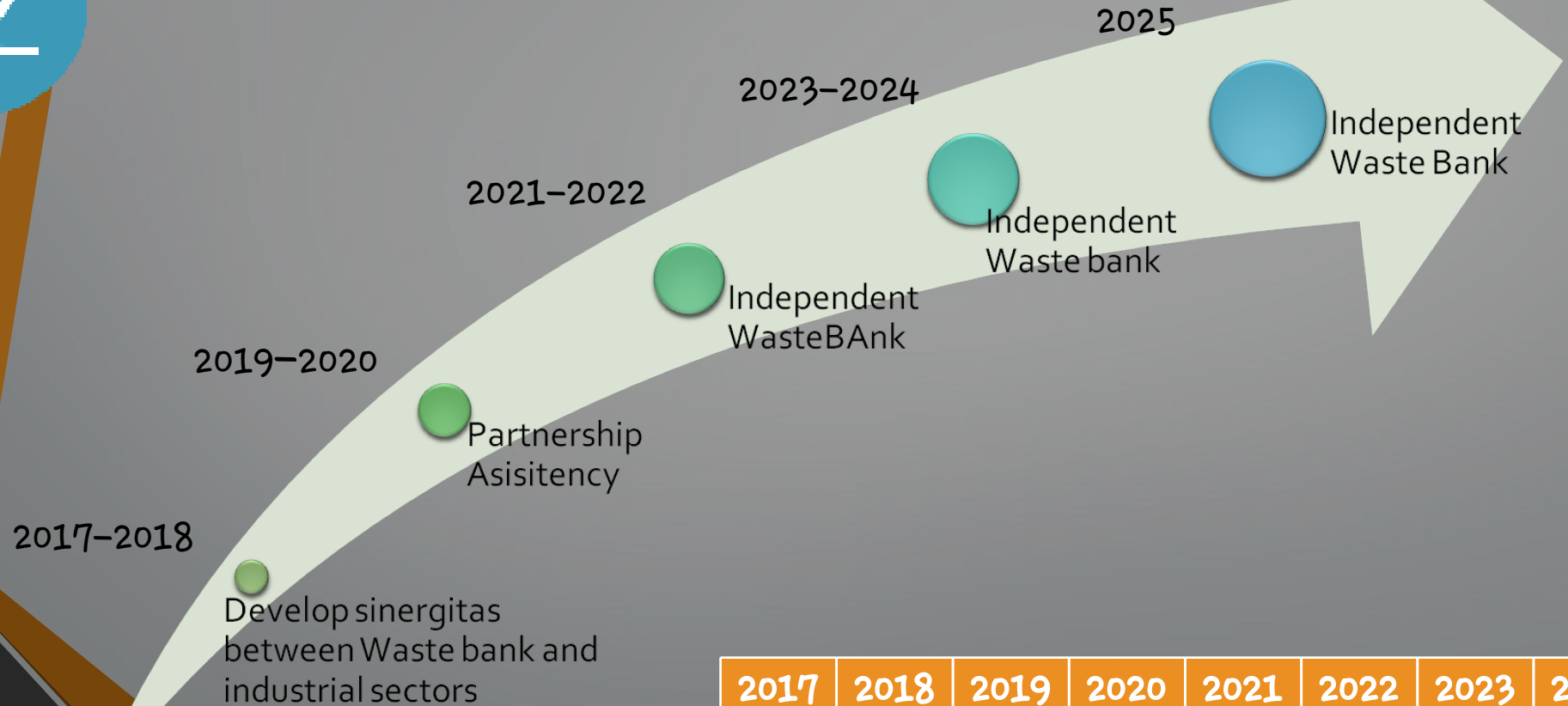
Indicator	National Target on Solid Waste Management										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Solid Waste Estimation (Million Ton)	64.4	65.2	65.8	66.5	67.1	67.8	68.5	69.2	69.9	70.6	71.3
Solid Waste Reduction (Million Ton)	10% (6.44)	12% (7.82)	15% (9.89)	18% (12)	20% (13.4)	22% (14)	24% (16.4)	26% (17.99)	27% (18.9)	28% (19.7)	30% (20.9)
Solid Waste Handling (Million Ton)	70% (45)	71% (46)	72% (47.3)	73% (48.5)	75% (50.3)	75% (50.8)	74% (50.7)	73% (50.52)	72% (50.3)	71% (50.1)	70% (49.9)

- Under the Presidential Decree No. 97/2017 stated the national target of solid waste management are 100% well managed in years 2025 by;
 - 30% of waste reduction
 - 70% of waste handled
- In year 2025, there is no littering of solid waste in the river, beach, ocean, open dumping system and open burning

Promoting of Resource Efficiency and Circular Economy of Solid Waste Management



ROADMAP OF SOLID WASTE REDUCTION THROUGH THE WASTE BANK (Presidential Decree No 97/2017)



2017	2018	2019	2020	2021	2022	2023	2024	2025
2125	2725	3325	3535	3645	3755	3865	3976	4085



THANK YOU

“For the better life and support next young generation we have to work together in one unity to safe the world”